ABSTRACT OF THE DISCLOSURE

Systems and methods are described for using a library with a plurality of application programs. In particular, the systems and methods enable the tuning of the response of a library with application program specific macros. A method includes: providing an interface for communication between a set of first programs and a second program; and providing to the second program at least one of a set of third programs associated with at least one of the set of first programs, in response to a dataset associated with the at least one of the set of first programs. The at least one of the set of third programs may selectively modifies the interface for communication between the second program and the at least one of the set of first programs. The set of first programs can be the application programs employed in a design flow of a circuit, the second program can be an active library for providing a macro facility to the application programs, and the set of third programs can be plug-ins such as a set of shared object libraries or dynamic link libraries. The systems and methods provide advantages in that the active library being a shared object or a dynamic link library can be readily extended through the use of plug-ins for dynamic integrated circuit calculation and modeling, and for rapidly achieving design convergence within a design flow.